

## 03050111-050

(*Potato Creek*)

### General Description

Watershed 03050111-050 is located in Clarendon County and consists primarily of *Potato Creek* and its tributaries. The watershed occupies 31,658 acres of the Upper Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Noboco-Bonneau-Paxville-Rutledge series. The erodibility of the soil (K) averages 0.15 and the slope of the terrain averages 2%, with a range of 0-10%. Land use/land cover in the watershed includes: 42.1% forested land, 27.2% agricultural land, 17.8% scrub/shrub land, 6.8% forested wetland, 5.7% water, 0.2% barren land, and 0.2% nonforested wetland.

Potato Creek accepts the drainage of Wyboo Swamp, Church Branch, and Big Branch as it forms an arm of Lake Marion. Wyboo Swamp is formed from the drainage of Dean Swamp, Buckhead Branch, McCoys Branch, Rooty Branch, Bluff Branch, White Oak Branch (Three Hole Swamp), Birch Branch, White Oak Creek, Lizzies Branch (Clubhouse Branch) and Carroll Slough. There are a total of 59.1 stream miles and 1,719.9 acres of lake waters in this watershed, all classified FW. The Santee National Wildlife Refuge extends over a large portion of the watershed.

### Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
ST-035/SC-020	INT/SC	FW	POTATO CREEK AT S-14-127, 3.2 MI S OF SUMMERTON
SC-019	SC	FW	LOWER LAKE MARION AT POTATO CREEK FLOODED EMBAYMENT
SC-023	SC	FW	LOWER LAKE MARION AT WYBOO CREEK FLOODED EMBAYMENT
RS-01051	RS01	FW	WHITE OAK CREEK AT COUNTY RD 345, 4.5 MI ESE OF SUMMERTON
ST-036/SC-023A	INT/SC	FW	LAKE MARION, WYBOO CREEK ARM DOWNSTREAM OF CLUBHOUSE BRANCH
ST-024	P/I	FW	LAKE MARION AT END OF S-14-64 AT CAMP BOB COOPER

***Potato Creek (ST-035/SC-020)*** - Aquatic life uses are not supported due to dissolved oxygen and pH excursions. Recreational uses are partially supported due to fecal coliform bacteria excursions.

***Potato Creek Arm of Lake Marion (SC-019)*** - Aquatic life and recreational uses are fully supported. Aquatic macrophytes have proliferated and public access has been restricted in Potato Creek due to shallow depth and high nutrient levels. To abate aquatic plant growth in this area of the lake, aquatic herbicides have been applied several times since 1989. Aquatic herbicide has been applied more recently (1999-2004) to reduce problem plant populations and to reduce impacts to public accesses, recreational uses, irrigation withdrawals, navigation, and water quality.

***Wyboo Creek Arm of Lake Marion*** – There are three monitoring sites (SCDHEC and SCPSA) in the Wyboo Creek arm of the lake (***SC-023***, ***ST-036/SC-023A***, ***ST-024***), and aquatic life and recreational uses are fully supported at all sites. At ***ST-024***, there is a significant decreasing trend in dissolved oxygen concentration. Significant decreasing trends in total nitrogen concentration and fecal coliform bacteria concentration suggest improving conditions for these parameters at this site.

**White Oak Creek (RS-01051)** - Aquatic life uses are fully supported, but recreational uses are partially supported due to fecal coliform bacteria excursions.

*A fish consumption advisory has been issued by the Department for mercury and includes portions of Lake Marion within this watershed (see advisory p.39).*

### **Natural Swimming Areas**

**FACILITY NAME**  
**RECEIVING STREAM**

**PERMIT #**  
**STATUS**

RM COOPER 4H CENTER  
LAKE MARION

14-N01  
ACTIVE

## **Nonpoint Source Management Program**

### **Land Disposal Activities**

#### **Land Application Sites**

**LAND APPLICATION SYSTEM**  
**FACILITY NAME**

**ND#**  
**TYPE**

SPRAY ON GOLF COURSE  
WYBOO PLANTATION/PHASE II

ND0072427  
DOMESTIC

## **Growth Potential**

There is a moderate potential for continued residential and commercial development along this section of lakeshore, which includes several new subdivisions and golf courses. The watershed also contains the Clarendon County Airport.